

FREYDENZON, Ye.Z.; RYABOKON', N.K.; SKAKUN, V.D.; RABINOVICH, D.M.;
BAZILEVICH, T.N.

Improving the mechanical properties of lightweight rolled shapes
made of carbon and low-alloy steels. Stal' 22 no.3:262-263 Mr
'62. (MIRA 15:3)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Steel alloys--Heat treatment)

FREYDENZON, Ye.Z.; RYABOKON', N.K.; RABINOVICH, D.M.; SEREBRYAKOV, V.S.

Properties of welded heat-treated rails. Stal' 22 no.11:1040-
1041 N '62. (MIRA 15:11)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Railroads--Rails)

GOL'DSHEYN, M.I., kand. tekhn. nauk; KAMPANIYETS, G.M., inzh.; PANFILOVA,
L.M., inzh.; RABINOVICH, D.M., inzh.; MURAV'YEV, Ye.A., inzh.;
LOSHKINA, N.A., inzh.

Effect of vanadium and heat treatment on th properties of St.
3kp rimmed steel. Stal' 24 no.10:925-927 0 '64.

(MIRA 17:12)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
i Nizhne-Tagil'skiy metallurgicheskiy kombinat.

L 53978-65 EWI(m)/ENP(w)/EWA(d)/T/ENP(t)/ENP(z)/ENP(b) JD

ACCESSION NR: AP5014866

UR/0133/65/000/006/0553/0557

621.43.669.15.194

22
218

AUTHOR: Freydenzon, Ye. Z.; Rabinovich, D. M.; Vinokurov, I. Ya.; Loshkina, N.A.;
Naymushina, L. F.; Freydenzon, Yu. Ye.

TITLE: Ways of improving the mechanical properties of low-carbon and low alloy
steel sheets and sections

SOURCE: Stal', no. 6, 1965, 553-557

TOPIC TAGS: toughening, low carbon steel, low alloy steel, sheet steel,
steel section, steel beam, quenched steel, toughened steel, spray quenching,
quenching tank, impact toughness

Card 1/3

L 53978-65
ACCESSION NR: AP5014866

spray installation. For stabilization of the properties at the required level and enhancement of plasticity after the toughening by quenching in the tank, it is expedient to perform additional treatment.

3 tables. orig. art. has: 4 figures,

ASSOCIATION: Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhniy Tagil
Metallurgical Combine)

Card 2/3

YISLOROV, G.I., inzh.; RABINOVICH, D.M., inzh.; ORLOVA, N.I., inzh.;
SHM NIN, I.A., inzh.; KOMPANIYETS, G.M., inzh.; KONDRAT'YEV,
S.B., inzh.; LOSHKINA, N.A., inzh.

Nonmetallic inclusions in rails in various methods of deoxidizing
steel. Stal' 25 no.6:557-559 Je '65. (MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

FIGYDENCO, Ye.Z., inzh.; KOMPANIYETS, G.M., inzh.; RABINOVICH, D.M., inzh.;
ZAILOVSKAYA, Ye.Z., inzh.; SHCHETKINA, N.A., inzh.

Effect of the composition of the heat insulating material
on the macrostructure of rails. Stal' 25 no.8:803-805 S '65.
(MIRA 18:9)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

RABINOVICH, D. V., KAYEPANOVICH, M. M., GOL'DENBAL'K, V. V., RAFUTOV, I. I. and SHELEEV, M. I.

"Construction of Electric Power Transmission Lines" (Sooruzheniye liniy elektropered-
achi), 527 pp, Moscow-Leningrad, 1950.

RABINOVICH, D.V.

GUL'DENBAL'K, V.V.; KAMENSKIY, A.A. [deceased]; RABINOVICH, D.V.; RAPUTOV,
I.I.; YEMZHKOV, V.V., redaktor; SKVORTSOV, I.M., tekhnicheskiy
redaktor

[Construction of electric lines carrying 35-220 kilovolts] Soorushenie
linii elektroperedachi 35-220 kv. Moskva, Gos. energ. izd-vo 1954.
359 p. (MIRA 7:9)

(Electric lines)

GUL'DENBAL'K, Vadim Vladimirovich; RABINOVICH, David Vladimirovich; RAPUTOV, Il'ya Izrailevich; MEDVEDEV, L.Ya., tekhn.red.

[The construction of electric transmission lines] Sooruzhenie linii elektropredachi. Pod red. V.V. Gul'denbal'ka. Izd. 4-oe, perer. Moskva, Gos.energ.izd-vo, 1957. 479 p. (MIRA 11:1)
(Electric lines--Overhead)

RABINOVICH, D.V., inzh.; LYASOTSKIY, S.V., inzh.; MERMAN, I.A., inzh.

Construction of 110 kv. electric transmission lines on reinforced concrete supports. Energetika 8 no.3:2-7 Mr '60.
(MIRA 13:6)

(Electric lines--Poles)

GUL'DENBAL'K, Vadim Vladimirovich[deceased]; KAYETANOVICH, Mikhail
Mikhaylovich; RABINOVICH, David Vladimirovich; REUT,
Mikhail Antonovich; FRIDKIN, L.M., tekhn. red.

[Construction of overhead power transmission lines] So-
oruzhenie linii elektroperedachi. Izd.5., perer. [By] V.V.
Gul'denbal'k i dr. Moskva, Gosenergoizdat, 1963. 462 p.
(MIRA 17:2)

GUL'DENBAL'K, Vadim Vladimirovich [deceased]; KAYETANOVICH,
Mikhail Mikhaylovich, inzh.; RABINOVICH, David
Vladimirovich, inzh.; REUT, Mikhail Antonovich, inzh.;
FRIDKIN, L.M., tekhn. red.

[Construction of electric power transmission lines] Sooru-
zhenie lini elektropredachi. [By] V.V.Gul'denbal'k i dr.
Izd.5., perer. Moskva, Gosenergoizdat, 1963. 462 p.
(MIRA 16:8)

(Electric lines—Overhead)

RABINOVICH, D. Ya.
KOVTUNOVICH, S.D.; RABINOVICH, D.Ya.

Replacing OP-10 with a detergent for degreasing leather. Leg.prom.
16 no.10:50 0 '56 (MIRA 10:12)

(LEATHER INDUSTRY)

ARTEMKINA, L.N., kand.med.nauk; OMBRADOS, V.F.; RABINOVICH, D.Ya;

Problem of the clinical aspects of Escherichia coli in children.
Vop.okh.mat. i det. 4 no.2:17-21 Mr-Apr '59. (MIRA 12:5)

1. Iz kafedry gospiatal'noy pediatrii (zav. - prof. K.F.Popov)
II Moskovskogo meditsinskogo instituta im. N.I.Pirogova i
Detskoy klinicheskoy bol'nitsy im. I.V.Rusakova (glavnyy
vrach V.A.Krzhkov, nauchnyy rukovoditel' - prof. M.M.Rubnova).
(ESCHERICHIA COLI) (CHILDREN--DISEASES)

VISHNEVETSKAYA, L.O., doktor med.nauk; VOYT, Ye.B.; KATYSHEVA, A.V.;
RABINOVICH, D. Ya; FRIDMAN, E.Ye.; SHALEVICH, M.A.

Morphology of intestinal diseases caused by pathogenic strains
of *Escherichia coli* in children a few months old. *Pediatrics* 38
no.4:27-31 Apr '60. (MIRA 16:7)
(*ESCHERICHIA COLI*)

BERZINA, L.A.; VINTOVKINA, I.S.; RABINOVICH, D.Ya.

Gastrointestinal disorders in influenza in children. *Pediatrics*
39 no.4:48-53 Ap '61. (MIRA 14:4)

1. Iz infektsionnogo otdela (zav. - prof. M.Ye. Sukhareva) kafedry
pediatrii (zav. - deystvitel'nyy chlen AMN SSSR G.N. Speranskiy)
TSentral'nogo instituta usovershenstvovaniya vrachev, infektsionno-
go otdela (zav. - prof. S.D. Nosov) Instituta pediatrii AMN SSSR
i 2-y Moskovskoy gorodskoy klinicheskoy detskoy bol'nitsy imeni
A.V. Rusakova (glavnyy vrach - zasluzhennyy vrach RSFSR B.A.
Kruzhkov).

(INFLUENZA)

(ALIMENTARY CANAL--DISEASES)

RABINOVICH, E. A.

RABINOVICH, E. A. Problem-book in general electrical engineering.
Moskva, Gos, energ. izd-vo, 1951. 160 p. (52-36438)

TKI68.R3

RABINOVICH, Emmanuil Abramovich; SURGUCHEV, Vladimir Dmitriyevich; KRAYZ,
A.G., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Collection of problems in general electric engineering] Sbornik
zadach po obshchei elektrotekhnike. Moskva, Gos.energ.izd-vo, 1955.
176 p. (MLRA 9:1)

(Electric engineering--Problems, exercises, etc.)

RABINOVICH, Emmanuil Abramovich; SURGUCHEV, Vladimir Dmitriyevich; ANTIK,
I.V., redaktor; VORONIN, K.P., tekhnicheskii redaktor

[A collection of problems in general electric engineering] Sbornik
zadach po obshchei elektrotekhnike. Moskva, Gos. energ. izd-vo,
1956. 167 p. (MLRA 9:11)
(Electric engineering--Problems, exercises, etc.)

RABINOVICH, Emmanuil Abramovich; SURGUCHEV, Vladimir Dmitriyevich;
MIRAKOV, N.A., red.; FRIDKIN, A.M., tekhn.red.

[Collection of problems in general electric engineering] Sbornik
zadach po obshchei elektrotekhnike. Izd. 3-e. Moskva, Gos. energ.
izd-vo, 1958. 239 p. (MIRA 11:5)
(Electric engineering--Problems, exercises, etc.)

RABINOVICH, Emmanuil Abramovich; GRONDA, V.I., red.; SHVETSOV,
S.V., tekhn. red.

[Laboratory work in general electrical engineering] Laboratornye raboty po obshchei elektrotekhnike; uchebno-metodicheskoe posobie dlia tekhnikumov. [n.p.] Rosvuzizdat, 1963. 135 p. (MIRA 16:12)
(Electric engineering--Laboratory manuals)

RABINOVICH, E.A.; SURGUCHEV, V.D. [deceased]; KAPLER, A.A., red.

[Collection of problems in general electrical engineering]
Sbornik zadach po obshchei elektrotekhnike. Izd.4., perer.
Moskva, Izd-vo "Energia," 1964. 320 p. (MIRA 17:5)

RABINOVICH, B.Yo.

Analyzing the basic systematic errors in the alternating-voltage
measuring method by compensation of the detection current. Trudy
VNIIM no.13:26-49 '53. (MIRA 11:6)
(Electric currents, Alternating--Measurements)

RABINOVICH, B.Ye.

Effect of the shape of voltage curves on electron-tube voltmeter
readings. Izv.tekh. no.4:43-48 J1-Ag '56. (MLRA 9:11)
(Electron-tube voltmeter)

RABINOVICH, B. Ye., red.

[Instructions 214-54 for checking X-band wave meters] Instruktsiia 214-54 po poverke rezonansnykh volnovarov trekh-santimetrovogo diapazona. Izd. ofitsial'noe. Moskva, 1956. 11 p. (MIRA 14:5)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov. (Microwave measurements)

(RABINOVICH, B.Ye., kand. tekhn. nauk, red.

[Instructions 213-54 for checking tuned s-band wave meters]
Instruktsiya 213-54 po poverke rezonansnykh volnomerov de-
siatitsentimetrovogo diapazona. Izd. ofitsial'noe. Moskva,
1956. 11 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeri-
tel'nykh priborov.

(Microwave measurements)

RABINOVICH, B.Ye., red.; MATVYKEVA, A.Ye., tekhn. red.

[Instructions 225-55 for checking X-band absorbing attenuators]
Instruktsia 225-55 po poverke pogloshchayushchikh oslabitelei
trekhsentimetrovogo diapazona voln. Izd. ofitsial'noe. Moskva,
1957. 24 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeri-
tel'nykh priborov. (Attenuators (Electronics))
(Microwave measurements)

RABINOVICH, B.Ye.

24(0): 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215
Vsesoyuzny nauchno-issledovatel'skiy institut metrologii imeni
D.I. Mendeleeva
Referaty nauchno-issledovatel'skikh rabot: sbornik No. 2 (Scientific
Research Abstracts: Collection of Articles, Nr 2) Moscow,
Standartgiz, 1958. 139 p. 1,000 copies printed.
Additional Sponsoring Agency: USSR. Komitet standartov, mer i
izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers,
and engineers engaged in developing standards, measures, and
gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-
ment and control. The reports were prepared by scientists of
institutes of the Komitet standartov, mer i izmeritel'nykh
priborov pri Sovete Ministrov SSSR (Commission on Standards,
Measures, and Measuring Instruments under the USSR Council of
Ministers). The participating institutes are: VNIM -
Vsesoyuzny nauchno-issledovatel'skiy metrologii imeni D.I.
Mendeleeva (All-Union Scientific Research Institute of Met-
rology imeni D.I. Mendeleev) in Leningrad; Sverdlovskiy
of this institute; VNIM - Vsesoyuzny nauchno-issledovatel'skiy
institut Komiteta standartov, mer i izmeritel'nykh priborov
(All-Union Scientific Research Institute of Standards, Measures,
and Measuring Instruments) in Moscow; Gosudarstvennyy
izmeritel'nykh priborov (Moscow State Institute of Measures
and Measuring Instruments) in Moscow; Institut fiziko-tekhnich-
eskikh i radiotekhnicheskikh izmereniy (All-Union Scientific
Research Institute of Physicotechnical and Radio-engineering
Measurements) in Moscow; NGIMIP - Kharkovskiy gosudarstvennyy
institut mer i izmeritel'nykh priborov (Kharkov State Institute
of Measures and Measuring Instruments); and NGIMIP - Novosil-
bivskiy gosudarstvennyy institut mer i izmeritel'nykh priborov
(Novosibirsk State Institute of Measures and Measuring Instru-
ments). No personalities are mentioned. There are no references.

Galkina, R.I. (Sverdlovsk Branch of VNIM). Determining the
Composition of Spectral Reference Samples. 119

Measurements in Radio Engineering (Rabinovich, B.Ye., Editor.
Candidate of Technical Sciences)

Stoyakina, O.V. (VNIM). Studying the Sources of Error in the
Resonance Method of Measuring Dielectric Permeability and Tangent
of the Angle of Dielectric Losses 121

Rabinovich, B. Ye., and A.M. Fedorov. (VNIM). Developing and
Studying a Standard Voltmeter for Checking Vacuum-tube Volt-
meters 121

Rabinovich, B. Ye., and O.V. Stoyakina. (VNIM). Standard
Apparatus for Checking Generators of Standard Signals by the Out-
put Voltage or Power and for Checking Attenuators Produced as
Single Instruments 123

Card 24/27

RABINOVICH, B.Ye.; FEDOROV, A.M.

Standard diode compensation voltmeters. Izv. tekhn. no. 2: 74-78
Mr-Ap '58. (MIRA 11:3)
(Electron-tube voltmeter)

84492
S/112/59/000/014/069/085
A052/A001

9,6000 (1012, 1024, 1099, 1331)

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 14, p. 243,

30273

AUTHORS: Rabinovich, B.Ye., Kshimovskiy, V.V., Stoyakina, O.V.

TITLE: New Development in the Field of Radiotechnical Measurements

PERIODICAL: Tr. Vses. n.-i. in-ta metrol., 1958, No. 33 (93), pp. 94-100

TEXT: The state of individual branches of radiotechnical measurements in institutes and laboratories of the Committee of Standards, Measures and Measuring Instruments is reviewed. 1) The frequency measurement is performed by groups of reference piezocrystal generators and frequency multipliers. The 1st order frequency measuring appliance of Avangard type enables one to measure frequencies up to 50,000 Mc. At present radiotechnical control laboratories are equipped with master instruments measuring frequencies with an error of $\pm 5 \cdot 10^{-5}$. 2) The power measurement on VHF at 3- and 10-cm range by means of calorimetric meters with water load and a comparison of methods developed in several laboratories have shown a good coincidence of the results. An isothermal calorime-

Card 1/3

84492
S/112/59/000/014/C69/085
AO52/A001

New Development in the Field of Radiotechnical Measurements

ter with a cooling element and a calorimeter with phase transition (ice calorimeter) have been designed. The ponderomotive force method has been investigated. An automatic thermistor direct current bridge with an error of the measuring circuit of 1.5-2% has been developed. 3) For testing and checking tube voltmeters and standard-signal generators, OKV-1 and OKV-2 master voltmeter have been developed having voltage range of 20 mv-100 volts and frequency range of 30 cycles-300 Mc with a basic error of $\pm (0.2 + \frac{0.08}{U})\%$. Also have been developed master photovoltmeter, pulse voltmeter, millivoltmeter and UGSS-1 and UGSS-2 devices for checking standard-signal generators of meter and decimeter band (20-700 Mc) at a voltage of 5 microvolts and higher. For checking standard-signal generators in up to 25 Mc band at voltages of 1 microvolt-1 volt a device has been designed working on a principle utilizing master h-f voltage dividers of a film type. 4) Various attenuators for precise checking of attenuators in a broad frequency band, including meter, decimeter and centimeter bands, have been developed. 5) For measuring the amplitude modulation factor the UAM-1 device has been developed for carrier frequency band of 0.1-3 Mc with an error of 1%. The MKh-3 and MKh-5 master devices make it possible to check standard-signal

Card 2/3

84492
S/112/59/000/014/069/085
A052/A001

New Development in the Field of Radiotechnical Measurements

generators with an accuracy of 2% at a modulation factor of 15-80%. For measuring the non-linear distortion factor from 0.3 to 50% a device has been designed working in a 60 cycle-20 kc band with an error of 2%. 6. For current measurement an electrodynamic ammeter with an error of 1% and a photo-ammeter with an error of 2.5% are mentioned. A master device is being developed for measurements within a range of 0.001-100 amp on frequencies up to 100 Mc. A device for checking standard-signal generators in a pulse operation has the following characteristics: radio pulse duration 0.1-250 microseconds, front duration > 0.1 microsecond, repetition frequency 50-10,000 cycles and delay time from 1 to 2,000 microseconds. There are 43 references.

R.S.M.

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

RABINOVICH, B Ye.

В. В. Гринин

Методы измерения до истощения амплитуды добротности кварцевых элементов в форме брусков

В. А. Фомин

О влиянии частоты колебаний и дробности резонанса на добротность частот выходящих частот

В. В. Калашин

Измерение добротности облученных резонаторов на частоте среза

А. В. Лавин

Параметры частоты колебаний (резонаторов) в цепи с обратной связью

Г. А. Виноградов

Исследование стабильности амплитуды колебаний на выходящих частотах

9 июня

(с 18 до 22 часов)

А. Г. Виноградов

Новые радиоэлектронные приборы общего назначения

21

В. В. Лавин

Приборы для измерения частот до частоты до 100 МГц

А. В. Фомин

В. В. Калашин

Измерение добротности облученных резонаторов на частоте среза

В. В. Лавин

Измерение амплитуды колебаний на частоте среза с помощью резонансного контура

В. В. Гринин

Измерение амплитуды колебаний на частоте среза

В. В. Гринин

Устройство для измерения резонансной частоты ГСЧ на выходящих частотах и диапазоне частот от 0,1 до 100 МГц

10 июня

(с 10 до 18 часов)

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications to A. G. Popov (VSEI), Moscow, 6-18 June, 1959

9 (2)

SOV/115-59-10-16/29

AUTHORS: Strizhkov, G.M., ~~Rabinovich, B. Ya.~~

TITLE: Measuring the Current With a Thermistor Bridge on Frequencies up to 1,000 mc

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 10, pp 38-40 (USSR)

ABSTRACT: The authors give a detailed description of graphical and analytical calculations for the use of a thermistor bridge for measuring the highest frequency currents (Figs 1 and 3). For this purpose the TSh-2 and TSh-3 thermistor bridges must be used, since they have the smallest by-passing capacitance and currents from 1 to 10 mil-amp. can be measured by these bridges. There are 2 diagrams, 3 graphs and 1 Soviet reference.

Card 1/1

9.2200 3002

83647

S/058/60/000/008/004/009
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 8, p. 240, # 20529

AUTHORS: Fedorov, A.M., Rabinovich, B.Ye.

TITLE: Method of Experimental Determining the Frequency Dependence of the Indications of a Compensated Standard Voltmeter for Frequencies up to 1,000 Mc and Low Voltages

PERIODICAL: Tr. Vses. m.-i. in-ta metrol., 1959, No. 40 (100), pp. 27-33

TEXT: The influence of the resonance and drift errors is studied on the indications of a compensated standard voltmeter of the OKB-2 (OKV-2) type. The error determination was carried out by the method of comparing the indications of the investigated voltmeter with the indications of a thermistor voltmeter; for this purpose, a special diode-thermistor head was developed having the thermistor in a bulb. The thermistor was switched into the Θ НИИМ (VNIIM) - thermistor bridge circuit. Some diodes of the 2Д10 (2D1S)-type with different distances between the electrodes were subjected to the test. It turned out that the shift error theory is inapplicable to voltages ≤ 11 v because it does not take

Card 1/2

XX

83647

S/058/60/000/008/004/009

A005/A001

Method of Experimental Determining the Frequency Dependence of the Indications of a Compensated Standard Voltmeter for Frequencies up to 1,000 Mc and Low Voltages

into account the initial electron speeds. It is found that the error in measurement is not greater than $\pm 5\%$ at the Mc frequency.

↑ 1000 Mc

A.Sh.

Translator's note: This is the full translation of the original Russian abstract.

UX

Card 2/2

RABINOVICH, B. Ye., kand. tekhn. nauk, red.; KUZNETSOVA, M. I., red. izd-
va; MATVSEVA, A. Ye., tekhn. red.

[Instructions 212-54 for checking tuned P- band and S- band wave
meters] Instruksii 212-54 po poverke rezonansnykh volnometrov
metrovoego i detsimetrovoego diapazonov. Izd. ofitsial'noe. Mo-
skva, 1960. 20 p. (MIRA 14:5)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeri-
tel'nykh priborov.

(Microwave measurements)

69184

28(3) 9.6000

S/115/60/000/03/015/031
D002/D002

AUTHOR: Fedorov, A.M., Rabinovich, B.Ye.

TITLE: Investigation of a Thermistor Voltmeter at High Frequencies

PERIODICAL: Izmeritel'naya tekhnika, 1960, Nr 3, pp 31-33 (USSR)

ABSTRACT: A method of determining the dependence of the indications of a standard compensation voltmeter from the frequency in the voltage range of 0.1 to 1 volt, was treated by the authors in a previous work [Ref 1]. A thermistor voltmeter of the balanced-bridge system [Ref 2] was employed for comparing the voltage readings. In the present article, the equivalent circuit of the thermistor is analyzed and a method of determining the parameters of this circuit is explained. The thermo-sensitive element in the circuit is a "TSh-2B" thermistor. The skin effect is taken into account

Card 1/2

69B4

S/115/60/000/03/015/031
D002/D002

Investigation of a Thermistor Voltmeter at High Frequencies

in the equivalent circuit (Figure 1). There are 3
diagrams, 1 graph, 1 table and 3 Soviet references.

Card 2/2

ZALUTSKAYA, T.L.; KRZHIMOVSKIY, V.I.; KSHIMOVSKIY, V.V.; MOROZOVA, T.B;
RABINOVICH, B.Ye.; STOYAKINA, O.V.

Standard unit for measuring low power in the microwave range.
Izm. tekhn. no. 1:35-37 Ja '61. (MIRA 14:1)
(Electric measurements) (Microwaves)

RABINOVICH, B.Ye.

Mismatching errors in measuring and comparing output voltages
of generators. *Ism. tekhn. no.9:37-39 S '61. (MIRA 14:8)*
(Electric measurements)

35644

S/589/61/000/053/002/008
B109/B104

9.3220

AUTHOR: Rabinovich, B. Ye.

TITLE: Method of reproducing small HF voltages

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov.
Trudy institutov Komiteta. no. 53(113). 1961. Issledovaniya
v oblasti radiotekhnicheskikh izmereniy. 29-35.

TEXT: A quantitative relationship can be established between the easily measurable diode direct current and the diode a-c components of the fundamental frequency and the harmonics by rectifying an alternating voltage in a tube diode on the assumption of an exponential I-U characteristic. The usual method of reproducing small voltages, which utilizes the rectifying effect of the square part of a diode characteristic, has the shortcoming that the measured quantity is the difference of two relatively high d-c components, which requires complex stabilization measures to attain a high accuracy of measurement. This shortcoming can be avoided by the following new method: small diode currents obey the law $i = i_0 e^{Ku}$, where i_0 is the

Card 1/3

S/589/61/000/053/002/008
B109/B104

Method of reproducing ...

current with a zero anode-cathode potential, u is the diode voltage, K is a constant depending on the cathode temperature. If the alternating voltage $U_m \cos \omega t$ is connected to the diode circuit according to Fig. 1 then

$i = i_0 e^{-KU_0} \exp(KU_m \cos \omega t) = A_0 + A_1 \cos(\omega t + \varphi_1) + A_2 \cos(2\omega t + \varphi_2) + \dots$, where
 $A_0 = i_0 \exp(-KU_0) I_0(KU_m)$, $A_n = 2i_0 \exp(-KU_0) I_n(KU_m)$, I Bessel functions.

The ratio $A_n/A_0 = 2 I_n(KU_m)/I_0(KU_m)$ tends to 2 for high values of KU_m , so that the voltage amplitude U_{mn} of the n -th harmonic at the resistor R is quantitatively determined by the diode direct current i_{a0} by (8) $U_{mn} = 2i_{a0}R$, where i_{a0} is easily reproducible. (8) is independent of the diode bias so

that in practice the bias voltage can be produced by an RC network. For capacitor-blocked alternating voltage sources, a circuit according to Fig. 5 (R_2 serves for selecting the measuring range) is proposed which had been used by the author for experimental studies. The maximum difference between theoretical and experimental values was $\pm(1\% + 1/\sqrt{v})$ for voltages up to

Card 2/5

Method of reproducing ...

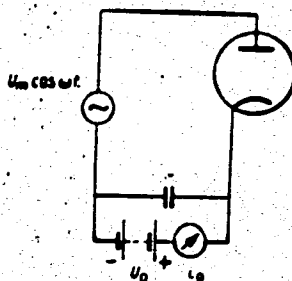
3/582/61/000/053/002/003
B109/B104

1000 μ v ($R = 80$ ohms) and 300 μ v ($R = 8$ ohms) and 50 μ v ($R = 0.8$ ohms). The difference between measurement data and theoretical values appears from Fig. 8. There are 11 figures and 1 non-Soviet reference. The reference to the English-language publication reads as follows: A. Pincirolì, "The production and measurements of small voltage at radio-frequency", Alta Frequenza, June, v. 8, No. 6, 1939.

ASSOCIATION: VNIIM

SUBMITTED: May 29, 1959

Fig. 1. Basic circuit diagram for the production of harmonics.



Card 3/5

35045

S/589/61/000/053/003/009
B109/B104

93210

AUTHOR:

Rabinovich, B. Ye.

TITLE:

Standard method of reproducing small HF voltages by means of harmonics

SOURCE:

USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. no. 53(113). 1961. Issledovaniya v oblasti radiotekhnicheskikh izmereniy. no. 53, 1961, 36-44

TEXT: In continuation of his paper "Method of reproducing small HF voltages" (same periodical, pp. 29-35), the author studies the reasons of the poor agreement between experimental and theoretical values at high frequencies. He develops a new method in which in the higher frequency ranges the harmonics of the feed voltage have no longer a disturbing effect owing to the use of high harmonics of the output voltage. Deviations from the theoretical course of the output voltage of the n-th harmonic of a rectified alternating voltage in the diode circuit are mainly caused by the distortion factor of the feed voltage whose harmonics reach the output via the disturbing capacitances caused by the installation and the anode - cathode

Card 1/3

S/569/61/000/053/003/008
B109/B104

Standard method of ...

capacitance C_{ak} of the diode. Since wiring capacitances could be completely eliminated by optimum screening of the outer wires and only C_{ak} (about 0.2 pf) remained as residual capacitance, the frequency behavior of the circuit improved considerably. The most important improvement was obtained by using higher harmonics since they are practically not present in the harmonics of the feed voltage. It has, however, to be considered that for higher harmonics the simple relation between a - c and d - c components $i_n \approx 2i_o (I_n(KU_m)/I_o(KU_m)) \approx 1$ for high KU_m is not sufficiently accurate. $I_n(KU_m)/I_o(KU_m) \approx 1 - cm^2$, where $c = 1/2KU_m$, n is the number of the harmonics, K a constant depending on the cathode temperature. With unknown K , c can be determined from measurements on two different harmonics of the same input voltage. The expression $U = \sqrt{2}(1 - cm^2)i_o \cdot R$ is obtained for the output voltage of the n -th harmonic which decreases at the resistor R . By this expression the tuning of a certain alternating voltage U is again brought to a d - c measurement (i_o). Measurements made by the author in

Card 2/3

Standard method of ...

S/589/61/000/053/003/008
B109/B104

the range of 2 to 24 Mcps with amplitudes of 20 mv up to 10^{-3} mv confirm
the theoretical values. There are 9 figures and 1 Soviet reference.

ASSOCIATION: VNIIM

SUBMITTED: May 29, 1959

Card 3/3

RABINOVICH, B.Ye.; STOYAKINA, O.V.

Study of the frequency errors of an attenuator using wire-wound resistances. Trudy inst. Kom. stand., mer i izm. prib. no.53: 75-79 '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D. I. Mendeleyeva.

(Attenuators (Electronics))

34676

S/115/62/000/003/010/010
E192/E382

9.1400

AUTHOR: Rabinovich B. Ye.

TITLE: Method of measuring the insertion loss of the attenuator which is free from mismatch errors

PERIODICAL: Izmeritel'naya tekhnika, no. 3, 1962, 44 - 47

TEXT: In normal measurements the value of the insertion loss due to an attenuator can be expressed by (Ref. 1 - Beatty - Journal of Research NBS, 1954, v.52, no. 1):

$$N_p = 20 \lg \left| \frac{(1 - \Gamma_H S_{22})(1 - \Gamma_1 \Gamma_2)}{Q(1 - \Gamma_1 \Gamma_H)} \right| \quad (4)$$

where Γ_H is the reflection coefficient of the load.

S_{22} is the reflection coefficient of the output of the attenuator (the input being terminated by a matched load);

Card 1/5

Method of measuring

S/115/62/000/003/010/010
E192/E382

- Γ_1 is the reflection coefficient of the input of the attenuator (the attenuator being terminated by a given load),
 Γ is the reflection coefficient of the output of the measuring generator, and
 Q the transfer coefficient of the attenuator, which is regarded as a quadrupole.

The error due to the mismatch is given by:

$$\Delta N = N_p - N_o = 20 \lg \left| \frac{(1 - \Gamma_1 \Gamma)(1 - \Gamma_H S_{22})}{(1 - \Gamma_p \Gamma_H)} \right| \quad (5)$$

where $N_c = 20 \lg \left| \frac{1}{Q} \right|$. The error due to the mismatch can

be reduced by using the following method of measurement: the transfer coefficient Q is determined by measuring the amplitude of the incident waves before and after the attenuator. The

Card 2/5

S/115/62/000/003/010/010
E192/E382

Method of measuring

equipment used in such measurements is illustrated in Fig. 1. This consists of: 1 - a generator; 2 and 3 - directional couplers; 4 - the measured attenuator; 5 - a load; 6 - measuring device for the voltage or power ratios, which is connected successively to the lateral arms of the directional couplers. It is seen that in the system of Fig. 1, the attenuator is preceded and followed by directional couplers. The insertion loss is determined by measuring the ratio of the voltages or powers in the lateral arms of the couplers. The inequality of the transfer coefficients of the couplers is eliminated by the preliminary measurement of the voltage ratios in the lateral arms, when the attenuator is removed. It is shown that by using this method the measured insertion loss is given by:

$$N_p = 20 \lg \frac{A'}{A} = 20 \lg \frac{1 - S_{22}^* \Gamma_H}{Q} \quad (11)$$

and the error due to the mismatch is expressed by:

Card 3/5

Method of measuring

S/115/62/000/003/010/010
E192/E382

$$\Delta N = N_p - N_o = 20 \lg (1 - S_{22} \Gamma_H) \approx - 8.69 S_{22} \Gamma_H \quad (12)$$

It is seen, therefore, that the error is produced by one pair of reflection coefficients instead of the three pairs (as in Eq. 5). The mismatch error can further be reduced by changing the reciprocal phase shift of the reflection coefficients S_{22} and Γ_H . The phase can be varied by inserting a suitable phase-shifter between the load and the output of the directional coupler 3 (see Fig. 1). An error is introduced by the fact that the real couplers do not have the required perfect directivity. This error is expressed by

$$\Delta N = 20 \lg \left(1 + A_o \frac{A}{A'} \right) \approx 8.69 \frac{|S_{11}| + |\Gamma_1|}{D_1} \text{ db} \quad (26)$$

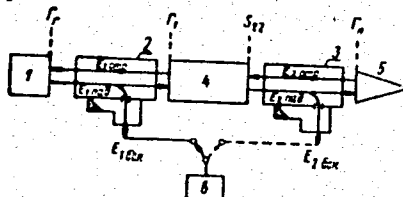
Card 4/5

Method of measuring

S/115/62/000/003/010/010
E192/E382

where D_1 is the directivity of the first coupler. The errors due to the reflections from the flanges of the directional couplers are also analyzed. It is concluded that by using the above method it is possible to eliminate totally at least two components of the mismatch error. The remaining error component can be reduced by employing a directional coupler of high directivity at the input of the attenuator and a coupler with a low reflection coefficient at its output; a load having a low reflection coefficient is also required. There are 2 figures and 2 references: 1 Soviet-bloc and 1 English (Ref. 1 - quoted in text).

Fig. 1:



Card 5/5

FEDOROV, A.M.; RABINOVICH, B.Ye.

Experimental determination of the frequency errors of diode voltmeters
in a frequency range up to 1,000 mc. Trudy inst. Kom. stand., ser
i izm. prib. no.65:26-32 '62. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im.
Mendeleeva.

(Microwave measurements) (Radio measurements)

RABINOVICH, B. Ye.

Summation of partial errors in the field of radio technical
measurements. Trudy inst. Kom. stand. mer i izm. prib. no.57:
19-33 '62. (MIRA 15:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D. I. Mendeleeva.

(Radio measurements)

L 38493-66

ACC NR: AR6017633 SOURCE CODE: UR/0272/66/000/001/0137/0137

AUTHOR: Rabinovich, B. Ye.

TITLE: Precise measurements of power and voltage at high frequencies

SOURCE: Ref. zh. Metrol. i izmerit. tekhn., Abs. 1.32.1035

REF SOURCE: Tr. in-tov Gos. kom-tya standartov. mer i izmerit. priborov SSSR, vyp. 76(136), 1965, 191-202

TOPIC TAGS: signal generator, voltage measurement, voltmeter

ABSTRACT: Voltage measuring and testing methods are described, including measurements of mean voltage values and testing of electron voltmeters; precise measurement of low voltage at high frequencies and testing of standard-signal generators by the output voltage; precise measurement of pulsed voltages and power at high frequencies. Orig. art. has: 10 figures and bibliography of 24 titles. L. Ivanova. [Translation of abstract] [NT]

SUB CODE: 09/

Card 1/1 LC

UDC: 389:621.3.023.083

L 40306-66

ACC NR: AR6017187 SOURCE CODE: UR/0058/65/000/012/A028/A028

35
B

AUTHOR: Rabinovich, B. Ye.

TITLE: Precision measurements of power and voltage at high-frequencies

SOURCE: Ref. zh. Fizika, Abs. 12A284

REF SOURCE: Tr. in-tov Gos. kom-ta standartov, mer i izmerit. priborov
SSSR, vyp. 76(136), 1965, 191-202

TOPIC TAGS: electronic measurement, voltmeter, signal generator,
high frequency measurement

ABSTRACT: The paper describes methods of measuring mean voltage values
and of testing electronic voltmeters: precision measurements of low
voltages in the high-frequency range with testing of standard-signal
generators by the output voltage; and precision measurements of pulsed
voltages and power in the high-frequency range. L. Ivanova. [Trans-
lation of abstract] [KP]

SUB CODE: 09/ SUBM DATE: none

Card 1/1 MLP

ACC NR: AP6021008 (A) SOURCE CODE: UR/0125/66/000/006/0064/0066

AUTHOR: Rabinovich, A. Ya.; Solodovnikov, S. A.; Chekedov, O. P.

40
B

ORG: [Rabinovich] All-Union Scientific Research Institute of Transport Construction
(Vsesoyuznyy nauchno-issledovatel'skiy institut transportnogo stroitel'stva); [Solodovnikov,
Chekedov] Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki
im. Ye. O. Patona AN UkrSSR)

TITLE: Welding of continuous rails directly on the railroad track

SOURCE: Avtomaticheskaya svarka, no. 6, 1966, 64-66

TOPIC TAGS: railway track, railway construction, welding technology, butt welding

ABSTRACT: Under the aegis of both institutes named above, a special mobile rail welding installation (welding train) (Fig. 1) has been developed for the on-the-spot welding of continuous rails on railroad tracks. The train consists of track motor car carrying a crane on which the welding machine is suspended, as well as three cars carrying equipment for remote control of the welding machine, a diesel generator, and portable accessories. R-50 type continuous rails of various length (250-800 m) are thus welded together from rail segments of

Card 1/4

UDC: 621.791.625.143

L 41270-66

ACC NR: AP6021008

a fixed length (25 m). The welding process consisted of a series of operations, each handled by a separate team of workers. All the operations are based on the continuous-flow principle so that all the workers are continually kept occupied (Fig. 2). The first team prepares the rails for welding by removing all fasteners and cleaning and properly aligning the contacting

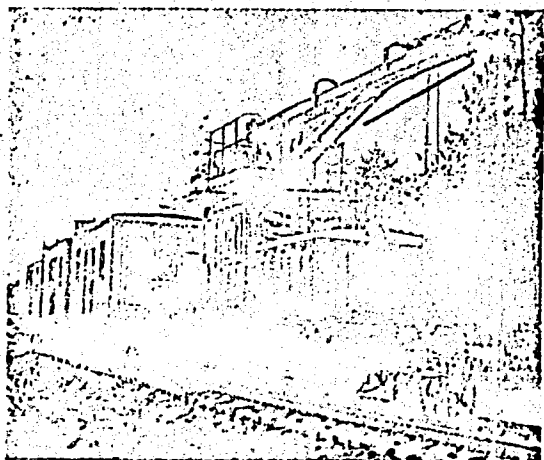


Fig. 1. Mobile rail-welding installation for on-track welding of continuous rails

Card 2/4

L 41270-66

ACC NR: AP6021008

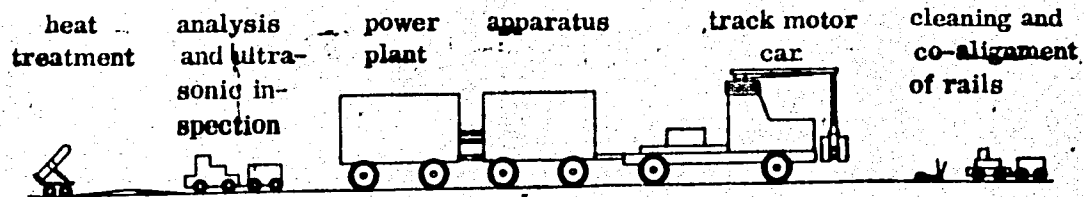


Fig. 2. Flowsheet of on-track welding

surfaces. After this, the welding train approaches the prepared pair of contacting rails and the machine proceeds with their butt-welding and the attendant trimming of the hot welds by means of pneumatic chipping chisels. After the welding and trimming are completed, the train advances toward the next pair of contacting rails, which by then is prepared for welding, while another team of workers is carrying out the normalizing of the preceding pair of rails at the underside of the contacting surfaces. The final operation involves grinding of the rail surfaces with the aid of a special rough-grinding machine, on jacking up the rails, and, later,

Card 3/4

L 41270-66

ACC NR: AP6021008

0

permanent attachment of rails to the trackbed by a special brigade of workers. The quality of the butt joints is checked by analyzing each day a sample joint (fracture and bend tests in a hydraulic press, ultrasonic inspection). On-track welding of this kind is definitely more economical than stationary welding, since it eliminates the need to build stationary rail-welding enterprises costing 400,000 to 800,000 rubles each, and thus it also eliminates the need for a special train (consisting of 78 two-axle flatcars) for carrying 800-meter continuous rails from the welding site to the rail-laying site, and moreover then a high and stable quality of welding of the rail butt joints is assured. An average welding train of this kind can process 70 km of track in a single year. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 13,11/ SUBM DATE: 13Dec65/ ORIG REF: 003

Card 4/4 LC

RABINOVICH, B.Ya., inzhener; KOROLEV, I.V., inzhener.

Use of blast furnace slags as fillers for asphalt concrete.

Shakht.stroi. no.3:27-29 Mr '57.

(MLRA 10:7)

(Asphalt concrete) (Slag cement)

RABINOVICH, E. A. Dr. Med. Sci.

Dissertation: "Pathologico-Anatomic Modifications of Pleura During Tuberculosis of Lungs." Central Inst. for Advanced Training of Physicians. 1 Jul 47.

SO: Vechernyaya Moskva, Jul, 1947 (Project #17836)

RABINOVICH, E.A., doktor meditsinskikh nauk.

Changes in the intramural innervation apparatus of the lungs in artificial pneumothorax in experimental animals. Probl.tub. no.4:31-35 J1-Ag '53.
(MLBA 6:11)

1. Iz Instituta tuberkuleza Akademii meditsinskikh nauk SSSR (direktor Z.A.Lebedeva, nauchnyy rukovoditel' - professor A.Ye.Rabukhin).
(Pneumothorax)

RABINOVICH, E.A.

Some characteristics of the morphology of tuberculosis in
elderly persons. Trudy TSU 63:73-39 '63. (MIRA 17:9)

1. Moskovskaya gorodskaya tsentral'naya klinicheskaya tuber-
kuleznaya bol'nitsa.

ACCESSION NR: AT3012133

S/2967/63/000/000/0165/0170

AUTHORS: Rabinovich, E. D.; Mikhnovskiy, S. D.; Podkolzina, K. M.; Shlyakhovaya, N. I.; Galenko, D. N.

TITLE: Arithmetic device with increased speed in execution of operations

SOURCE: Voprosy* vy*chislitel'noy matematiki i vy*chislitel'noy tekhniki. Moscow, 1963, 165-170

TOPIC TAGS: arithmetic device, binary system, partial addition, combination semi-integrator, transposition, square root operation

ABSTRACT: The logical structure and various junction schemes of a parallel arithmetic device of some general type are considered. The basic operations of the device are addition, subtraction, multiplication, division, and taking the square root, all done in a binary system with fixed decimal point location. The general electronic structure of the device is given with trigger elements, amplifiers, and semiconductor triodes. To improve the economy of operation, a two work-cycle system is used, carrying out partial addition by means of a combination semi-integrator. Multiplication is performed starting with the lowest digit with partial product shifts. To accelerate division operations, a transposition code is used,

Card 1/2

ACCESSION NR: AT3012133

transcribing the zero digit numbers in cells of the same register by the scheme
 $n - (j - 1) \rightarrow j$, where j - number of arbitrary zero digit. The time for performing
 a square root operation is given by $\tau_j = (3n + 2) \tau_1 + n \tau_2$, where n indicates quantity
 of zero digits in the mantissa of a number and τ is the work cycle. Orig. art. has:
 10 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 22Oct63

ENCL: 00

SUB CODE: CP

NO REF SOV: 003

OTHER: 001

Card 2/2

LIST AND PROPERTIES INDEX																									
COMMON ELEMENTS													COMMON VARIABLES												
<i>ca</i> Pyrolysis of the Surakhanui paraffinic fuel oil. N. A. Hutkov, E. I. Makusovich and T. P. Kolsenskaya. <i>Neftyanoe Khozyaistvo</i> 25, 29-35 (1933).—In the vapor-phase cracking of Surakhanui paraffinic fuel oil an apparatus consisting of an iron retort 1 m. long and 5 m. in diam. was used. It was heated electrically and the temp. was kept const. within 5°. The pressure in the retort was maintained at about 5 mm. Hg, and the cracking stock was charged at the rate of about 2.5 cc. per min. $C_{12}H_{26}$ (detd. by the flowway method) amounted to 0.08% (by vol.) when cracking at 700°, 0.00% at 750° and 0.12% at 850°. The Surakhanui mazout used had a sp. gr. of 0.884, initial b. p. 215°, below 300° 10%, E_m viscosity 3.54, ash 0.12%, paraffin (Hofde) 4.21%, pour point (Hofde) +20° and Brenken flash 121°. The yield of light fractions amounted to 18% and was almost const. regardless of the cracking temp., while their sp. gravities changed with temp., amounting to 0.840 at a cracking temp. of 700°. The "naphthalene" yield increased with increase in cracking temp., reaching 2.7% at 800°. The yield of pitch decreased from 20 to 13% with increase in temp. from 650° to 700° and remained const. on a further temp. increase. The vol. of gas increased with cracking temp. but the yield by wt. decreased. An increase in cracking temp. caused a decrease of the sp. gr., the calorific value and the content of higher olefins while the amt. of H_2 increased. The influence of the cracking temp. on various aromatic compds. was as follows: Increase in temp. raised the yield of C_6H_6, while that of $C_{10}H_8$ had a max. of 3.0%, decreasing on a further increase in cracking temp. $C_{10}H_8$ contained a max. of 16% of unsatd. compds. while $C_{10}H_8CH_3$ had a max. of 10.5%. The yield of coke was detd. separately in a porcelain tube, the tar being removed with CaH_2. The yield of coke varied between 4.15 and 7.37% while that of lamp black was 2.51-0.35%, yields about 5 times higher than those found on cracking kerosene distillate. The yield of pitch reached 4% calcd. on the cracking stock. The gases from cracking Surakhanui paraffinic fuel oil contained amylenes and C_4H_6, 1.7%, diacetylene (butadiene) 1.0-2.2, isobutylene 2.3, butylene and propylene 11.0, ethylene 19-18, H_2 13, CO_2, CO and O_2 3.0, methane 38 and ethane 12%. A. A. B.																									
ASD-11A METALLURGICAL LITERATURE CLASSIFICATION																									

Pyrolysis of gas. N. A. Butkov and E. I. Malanovskiy. *Neftyanoe Khimicheskoe* 25, No. 92 (1953). Gases obtained on vapor-phase cracking of petroleum have the following composition: butylenes 4.0, propylenes 12.0, ethylene 10, H₂ 14, methane and ethane 50%. The calorific values of these gases amount to 11,000-11,500 cal. and since they are high in heavier unsatd. compds. they are unsuitable for city gas because of the formation of condensation products. This gas was re-cracked in a special lab. app. described in the original paper consisting of a retort charged with refractory filters heated to 800°C, the pressure being maintained at 3-40 mm. Hg. The cracked product was passed through a hydraulic seal charged with white oil, an air and water cooler, 2 wash bottles charged with oil and 2 charcoal adsorbers. The gas obtained had a sp. gr. of 0.367-0.370, calorific value of 5810-5412 cal.; it contained higher olefins 0.0-0.7, ethylene 0.1-0.4, CO₂ 0.0-0.2, CO 1.3-1.7, H₂ 48.2-62.3 and C₂H₄ + N₂ 36.1-48.8%. The tar obtained as a result of pyrolysis had a sp. gr. of 1.024. In expts. carried out in porcelain tubes of various diams. a gas of 9464-9920 cal. was obtained. A prolonged exposure to high temps. caused a polymerizing effect, while a short exposure produced a lowering of unsatd. compds. such as amylene, butylenes and propylene and a slight increase in ethylene. The condensate contained up to 8% of crude C₁₀H₈ and 1% C₁₁H₁₂ in addn. to a light oil with a final b. p. of 175°.

A. A. Borchlingk

CA 22

PROCESSES AND PROPERTIES INDEX

Combined pyrolysis and hydrogenation. N. S. Butkov and E. I. Makinovich. *Neftyanoe Khozyaistvo* 29, No. 10, 65-72(1935). *Foreign Petroleum Tech.* 6, 91-102(1936); cf. C. A. 30, 6923P.—The "benzene" fraction from petroleum cracked at high temp. in the vapor phase was hydrogenated at 350° for 30 min., at a max. H₂ pressure of 71-72 atm. in the presence of Ni pptd. on infusorial earth; a stable fuel of octane no. 84 was produced. The low-boiling fractions were deficient because of their absence in the original product. The product had an I no. of 10.07, a f. p. 5° higher than the original "pyro benzene," and was lower in unsatd. compds.; it was a suitable aviation fuel. The refined product had an I no. of 0, aromatic content of 74.3% and an octane no. of 80. The high initial b. p. was improved by adding 20% of Baku aviation gasoline, thereby lowering the octane no. to 78. The "green" oil obtained in the pyrolysis of petroleum yielded after hydrogenation a motor fuel of octane no. 73, the yield amounting to 80.5-85% (with recycling). The tar residues gave a gasoline of octane no. 82, the yield being 93% of the raw product and the sp. gr. of the hydrogenated product was 0.9474. Thus the entire process yielded high-octane gasoline 40, C₁₁H₁₆ 15 and gas 30%. A. A. Bochtlingk

ASB-ILA METALLURGICAL LITERATURE CLASSIFICATION

6-2

100 octane hydrogenated gasoline. N. A. Butkov and
B. I. Rabinovich. *Neftyanoe Khoz.* 1936, No. 7, 67-70.—
It is possible to produce a gasoline of high octane no. by
hydrogenation of the unsatd. hydrocarbon residue of the
cracking process that at present have no market value.
The addn. of tetraethyl Pb (2 cc./l.) to the hydrogena-
ted product gives a 100-octane fuel rich in aromati-
c compds. and having a high f. p. L. Jacovleff

ASME SLA METALLURGICAL LITERATURE CLASSIFICATION

122

PROCESSES AND PROPERTIES INDEX

Catalytic aromatization of petroleum hydrocarbons under pressure. N. A. Butkov, E. I. Rabinovich and N. A. Chepurov. *Neftekhimicheskie Khimicheskie Khimicheskie* 1930, No. 6, 48-54. The dehydrogenation of gasoline at 500°, 180-220 atm. and in the presence of MoS₂ catalyst, increases the octane and in the presence of 71.5 to 77 and yields gasoline 77-80, no. of gasoline from 71.5 to 77 and yields gasoline 77-80, PhMe 8-9, gas 10.3, polymers 13.5 and unsatd. compds. in the PhMe fraction 2.0%. PhMe is obtained in the isomerization of methylocyclohexane and other higher- and lower-boiling hydrocarbons, the above reaction being favored by high pressure and consecutive dehydrogenation reactions. The expl. details are discussed. A. A. P.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

122

Ca

22

The destructive hydrogenation of pyrolyzed products.
N. A. Butkov and L. I. Rabinovich. *Nefteprom Akos.*
1937, No. 2, 53-4. Gasoline obtained by destructive
hydrogenation of pyrolyzed green oil must contain not
more than 20% aromatic compds. if a gasoline of octane no.
100 is to be obtained on addn. of 2 ml. of PbEt_2 to one l.
of gasoline. A. A. Rochtingk

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

AGAFONOV, A.V.; SUKHANOV, V.P.; RABINOVICH, E.I.; YUDINSON, R.N.

[Cracking of high-boiling point fractions of sulfurous oils
using aluminosilicates as catalysts] Rasloshenie vysokoki-
piashchikh fraktsii sernistykh neftei v prisutstvii aliumo-
silikatnykh katalizatorov; doklady na IV Mezhdunarodnom neftiannom
kongresse v Rime. Moskva, Izd-vo Akademii nauk SSSR, 1955. 46 p
(Catalysts) (Cracking process) (MLRA8:10)

Rabinovich, E. I.

✓ Cracking of high-boiling fractions from sour crude oils with silica-alumina catalysts. A. V. Agafonov, V. P. Sukhanov, E. I. Rabinovich, and R. N. Yudinson. Repts. 4th World Petroleum Congr., Rome 1955, 6-27 (in Russian, Engl. translation 28-47).—The catalytic cracking of full-boiling range crude oils and heavy residues with a silica-alumina catalyst is compared with straight-through coking processes with fluidized coke beds as the heat-trans-

RABINOVICH, E. [I.]

"Investigation of Size Effects in Sliding by Means of Statistical Techniques,"

paper submitted for presentation at the Conference on Lubrication and Wear,
London, 1-3 October 1957.

The Chartered Mechanical Engineer, , Sep 57, p. 340-41

RABINOVICH, E. I.

18 18
Hydrodynamics of Liquid Steel in the Ingot Mould. A. A.
Zorovskii, L. K. Nersisyan, M. K. Skul'nik, and E. I. Rabinovich.
Izv. Akad. Nauk SSSR, 1957, (1), 24-30. [In Russian]. The object
of the work was to find the duration and

"APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R001343

calculations must take into
as well as conductivity. S. K.

APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0013438

AGAFONOV, A.V. ; GEL'MS, I.E. ; RABINOVICH, E.I.

Selection of a catalyst for cracking residual petroleum fractions,
and study of poisoning of the catalyst during the process. Khim.
i tekhn. topliv. masel 5 no.6:6-12 Ie '60. (MIRA 13:7)

1. Vengerskiy nauchno-issledovatel'skiy institut po pererabotke
nefti i gazov i polucheniya iskusstvennogo zhidkogo topliva.
(Cracking process) (Catalysts)

RABINOVICH, E.M.

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS
Vol 32, Nr 6, 1957

19
PRODUCTION OF ELECTRON-POSITRON PAIRS IN COLLISIONS BETWEEN FAST
 π -MESONS AND NUCLEONS

E. M. Rabinovich

mu li
The cross section for pair production in collisions between high energy π -mesons and nucleons is calculated.

19

cm

ALEKSANDROV, K.A.; RABINOVICH, E.M.

Portable tablelike scaffold to be used in interior decorating.
Suggested by K.A.Aleksandrov, E.M.Rabinovich. Rats.i izobr.
predl.v stroi. no.12:44-46 '59. (MIRA 13:5)

1. Po materialam Glavmosstroya, Moskva, Sovetskaya pl., d.2/6.
(Scaffolding)

SIL'VESTROVICH, S.I.; RABINOVICH, E.M.

Structure and properties of fluor and phosphate opal glasses. Trudy
MKHTI no.27:78-97 '59. (MIRA 15:6)
(Glass research)

S/063/60/005/002/005/006
A003/A001

AUTHORS: Sil'vestrovich, S. I., Candidate of Technical Sciences, Rabinovich, E.M.
TITLE: Glasslike-Crystalline Materials
PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva im. D. I. Mendeleeva,
1960, Vol. 5, No. 2, pp. 186-191

TEXT: Glasslike-crystalline materials are obtained by introducing special mineralizers with a crystal lattice similar to that of the separating crystalline phases of the glass. There are two types of mineralizers: colloidal dyestuffs (Cu, Ag, Au, etc.) and dampers (P, TiO_2 , SnO_2). Colloidal dyestuffs are introduced into the glass charge with a reducing agent (tartaric acid, etc.) and tin dioxide or stannous oxide. It is assumed that the copper, gold and silver ions are reduced to neutral atoms. Tin dioxide increases their solubility. Recently glasses were obtained which are sensitive to ultraviolet radiation (Refs. 25-32). The neutral gold atoms form a latent image and are similar to sensitivity centers in photographic emulsions under the action of light (Ref. 24). At higher holding temperature the colloidal particles become centers of heterogeneous crystallization of the silicates. The process of heterogeneous crystallization of silicates in

Card 1/2

RABINOVICH, E.M.

Determination of the curves describing the formation of crystallization centers and the rates of crystal growth in glass by means of density measurements. Dokl.AN SSSR 138 no.1:159-16 My-Je '61.
(MIRA 14:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut elektrotekhnicheskogo stekla i tekhnologicheskogo oborudovaniya. Predstavleno akademikom A.V.Shugnikovym.
(Crystallization) (Crystals--Growth) (Glass)

SIL'VESTROVICH, S.I.; RABINOVICH, E.M.

Glass crystallization in the system $\text{SiO}_2 - \text{Al}_2\text{O}_3 - \text{MgO} - \text{R}_2\text{O}$
in the presence of additives. Trudy MKHTI No. 37:75-84 '62.
(MIRA 16:12)

VAYSFEL'D, N.M.; RABINOVICH, E.M.

Electron microscope investigation of flouride and phosphate opalin.
glasses. Zhur.prikl.khim. 35 no.11:2393-2398 N '62. (MIRA 15:12)
(Glass) (Electron microscopy)

ACCESSION NR: AT4019278

5/0000/63/003/001/0024/0031

AUTHOR: Rabinovich, E. M.

TITLE: Effect of crystallochemical similarity on the process of heterogeneous crystallization of glass

SOURCE: Simpozium po stekloobraznomu sostoyaniyu. Leningrad, 1962. Stekloobraznoye sostoyaniye, vy*p. 1: Katalizirovannaya kristallizatsiya stekla (Vitreous state, no. 1: Catalyzing crystallization of glass). Trudy* simpoziuma, v. 3, no. 1. Moscow, Izd-vo AN SSSR, 1963, 24-31

TOPIC TAGS: glass, glass crystallization, heterogeneous crystallization, cristobalite, tridymite, lithium metasilicate, nepheline, carnegieite, muscovite

ABSTRACT: The author investigated the influence, on the course of crystallization, of the crystallochemical similarity between the nuclei of heterogeneous crystallization produced by different substances, such as noble metals and copper, and the primary silicate phase. Binary and ternary systems were investigated, the primary crystallization phase of which is known from the phase diagrams. The parameters of the crystal lattices of many silicates (α -cristobalite, α -tridymite, lithium, metasilicate, lithium

Card 1/2

ACCESSION NR: AT4019278

disilicate, nepheline, α -carnegieite, muscovite) are tabulated and their relation to the parameters of the cubic lattices of Ag (4.078 Å), Pt (3.91 Å), Cu (3.61 Å) and NaF (4.62 Å) is demonstrated. The composition of the glasses and the experimental data (temperature and amount of additives) are also reported. The experimental results were found to agree with the theoretical. Orig. art. has: 1 Figure and 2 tables.

ASSOCIATION: None

SUBMITTED: 17May63

DATE ACQ: 21Nov63

ENCL: 00

SUB CODE: MT

NO REF SOV: 007

OTHER: 009

2/2

Card

KITAYGORODSKIY, I.I., doktor tekhn. nauk; RABINOVICH, E.M., inzh.;
SHELYUBSKIY, V.I., kand. tekhn. nauk

Regularities in the initial stages of the formation of crystal
structures in glass. Stek. i ker. 20 no.12:1-9 D '63.
(MIRA 17:1)

ACC NR: AP6033829

(N)

SOURCE CODE: UR/0096/66/000/011/0030/0034

AUTHOR: Drozdov, A. P. (Candidate of technical sciences); Rabinovich, E. M. (Engineer)

ORG: Central Boiler and Turbine Institute (Tsentral'nyy kotloturbinnyy institut)

TITLE: Investigation of operating temperatures of parts of the steam supply members of the leading model of K-300-240 DMZ turbine under natural conditions

SOURCE: Teploenergetika, no. 11, 1966, 30-34

TOPIC TAGS: turbine, steam turbine, thermal stress, temperature measurement

ABSTRACT: The authors measured the temperature distribution as a function of time in various parts of the turbine during a typical starting operation, with the purpose of evaluating the resulting thermal stresses. Thermocouples were placed in various internal and external parts of the turbine and the temperature recorded. The meridional and equatorial thermal stresses in the spherical part of the body wall were calculated on the basis of the theory of S. P. Timoshenko (Theory of Elasticity, ONTI, 1937). Because of the complicated geometry, simplifying assumptions were made. The calculated stresses were as high as 4150 kg/cm^2 , whereas the yield point for steel is 4300 kg/cm^2 . For other parts, the stresses were also close to the critical point, so that frequent careful inspection of the parts is recommended in the search for possible cracks which would indicate residual deformations. Orig. art. has: 4 figures and 5 equations.

SUB CODE: 10/ SUBM DATE: none/ ORIG REF: 005

UDC: 621.165.539.4.001.5

LANDA, I.M., inzh. [deceased]; RABINOVICH, E.S., inzh.; ZHURKO, V.A., inzh.

Studying the various Soviet and foreign makes of polyvinyl chloride resins and determining the possibility of their use in the manufacture of artificial leather with a fibrous base. Nauch.-issl. trudy Ukr NIIKP no.13:181-191 '62. (MIRA 18:2)

ZHURKO, V.A.; LANDA, I.M.; RABINOVICH, E.S.

Possibility of using polychlorovinyl resins for the manufacture
of artificial leather from fibers. Kosh.-obuv.prom. 2. no.5: .
12-14: '60. (MIRA 13:9)

(Leather, Artificial) (Resins, Synthetic)

RABINOVICH, E.Ye.

Investigating the rigidity of the bed of a horizontal broaching
machine. Stan.i instr. 33 no.1:19-22 Ja '62. (MIRA 15:2)
(Broaching machines--Testing)

KALESHIN, A.G.; KOVZEL', N.I.; RABINOVICH, E.Ye.

Broaching deep holes in cast-iron parts. Stan. 1 instr. 34
no.10:30-31 0 '63. (MIRA 16:11)

POVIL', N. I.; RABINOVICH, E. Ye.; KRUTS'KO, D.A.

Geometry of cutting tool and cutting conditions in broaching
brittle materials. Stan. i instr. 35 no.5:35-36 My '64.
(MIRA 17:7)

L 37083-66 EWP(k)/EWT(m)/T/EWP(t)/ETI IJF(c) DJ/JD

ACC NR: AP6008988

SOURCE CODE: UR/0121/65/000/011/0022/0026

AUTHORS: Rabinovich, E. Ye.; Kovzel', N. I.; Kruts'ko, D. A.

ORG: none

TITLE: Broaching with internal chip removal for machining deep openings

SOURCE: Stanki i instrument, no. 11, 1965, 22-26

TOPIC TAGS: metal broaching, broaching tool, metal cutting, broaching machine, cast iron, camera, strain gage, oscillograph/ 7A520, broaching machine, Sch12-28 cast iron, SKS-1M camera, BF-2 strain gage, MPO-2 oscillograph,

ABSTRACT: Based on recommendations by Ye. G. Konovalov (Osnovy novykh sposobov metalloobrabotki. Minsk, Izd-vo AN BSSR, 1961), a broaching tool of R18 alloy with internal chip removal was built and tested at SKB-12 in Minsk (see Fig. 1). The experiments were performed on horizontal broaching machine 7A520 at feeds of 0.1--1.5 mm/tooth and speeds of 3, 7 and 10 m/min using a coolant. These experiments were performed on 150 mm long Sch12-28 cast iron specimens. Films of the chipping process were taken with "Kiyev S-2" and SKS-1M film cameras, and broaching forces were recorded using BF-2 strain gages on an MPO-2 oscillograph. Curves of the specific broaching force (kg/mm) as a function of feed rate (0-1.5 mm/tooth) and tool angle ($\gamma = 10, 15, 20, 30^\circ$) and of chip size (mm) as a function of feed rate are presented. It was found that cast iron could successfully be broached at feeds of up to

Card 1/2

UDC: 621.919.3-47

L 37083-66

ACC NR: AP6008988

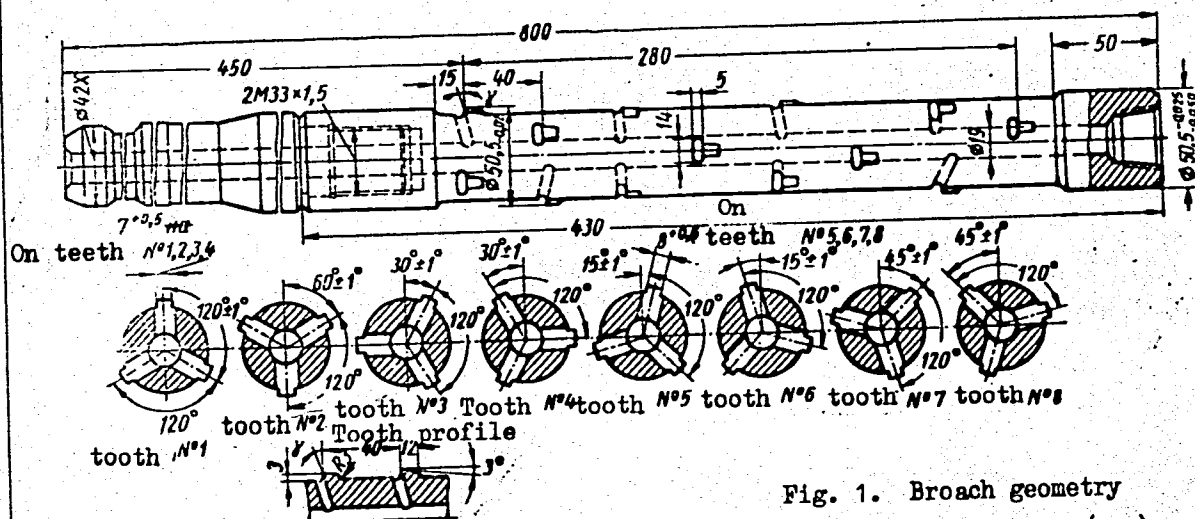


Fig. 1. Broach geometry

1.5 mm/tooth provided sufficient cooling fluid was introduced (≈ 90 liter/min).
 Orig. art. has: 8 figures. [Abstracter's note: There are 2 pages of detailed drawings of gear cutters between pages 24 and 25 of the article. These are not referred to and may belong with some other article.]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005

Card 2/2

EXCERPTA MEDICA Sec 10 Vol 12/10 Obstetrics Oct 59

1838. NOVOCAIN-PENICILLIN BLOCK IN THE TREATMENT OF ACUTE INFLAMMATORY PROCESSES OF FEMALE GENITALIA (Russian text) - Rabinovich E. Z. - AKUSH. I GINEK. 1959, 11 (79-81)

In 240 gynaecological patients novocaine block in conjunction with penicillin and streptomycin was beneficial. The novocaine-penicillin block was most effective in the treatment of parametritis and pelvioperitonitis. In a number of patients with a severe form of septicopyaemia the novocaine-penicillin block effected a prompt recovery.